



Coaching for Impact

Six Pillars to Create Coaching Roles That Achieve Their Potential to Improve Teaching and Learning

**The University of Florida
Lastinger Center for Learning**

Learning Forward

Public Impact

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Executive Summary

Coaching: Great Potential

The nation is looking to today's teachers to close student achievement gaps within the United States and with other nations. Despite efforts to support teachers with coaching, which began a culture shift in some schools, most teachers still do not get the support they need in their own classrooms.

For example, instructional specialist positions proliferated in the 1970s, and a more recent rise of coaching roles has focused on new and struggling teachers. But the facts do not lie: Only 49 percent of teachers report having had any coaching at all in the past 12 months, and only 12 percent had weekly coaching.¹ That is *all* coaching—regardless of quality. Yet most teachers, including experienced ones, need support to continue to evolve professionally, hone their practice, and use new tools. This support is most powerful when offered routinely and on the job by skilled professionals.

Defined broadly, coaching is a form of professional learning within classrooms that helps teachers develop strong plans, obtain feedback, refine their practices, and examine results. Research shows that strong coaching can make a significant difference for teacher practice and student outcomes.² Why then are so many teachers left out, and how can schools ensure that coaches have the greatest possible impact?

Three Organizations Join Forces to Call for a National Commitment to Great Coaching for All

Given this potential, education leaders need to ensure that coaching is designed and implemented to achieve its promise in more schools. Learning Forward, the University of Florida Lastinger Center, and Public Impact have long advocated for high-quality coaching for teachers, with years of lessons learned about how to make coaching a force for instructional improvement. Based on our experience, the research base on coaching, and a forward-looking analysis, we call on the nation's education leaders to expand their commitment to high-quality coaching for all teachers.

Six Pillars

We envision a future in which all teachers benefit from high-quality coaching that makes professional learning part of the daily routine at school. To reach that vision, six pillars are essential:

- 1. System Vision and Commitment.** System leaders commit to providing great coaching on the job for all teachers, and include this commitment in their vision and plans for instructional excellence. They mobilize the changes in spending, roles, and other policies needed to fulfill this commitment.
- 2. Recruitment and Selectivity.** Coaches are chosen for their excellent teaching and demonstrated beliefs and competencies needed to successfully coach other teachers.
- 3. Shared Responsibility.** Coaches assume responsibility for the professional learning and improvement of the teachers they coach and share responsibility for the learning of students taught by those teachers. System leaders take responsibility for equipping coaches with the supports they need.
- 4. Development and Support.** Systems give coaches the training, professional development, and ongoing support they need to be successful in the role.
- 5. Role Clarity, Time, and Culture.** Systems define the roles of coaches clearly; assign teachers to coaches deliberately; give coaches and the teachers they support adequate time during school hours to coach and be coached; and foster a culture that supports professional growth.
- 6. Compensation and Sustainability.** Systems make coaching a well-paid role that attracts and retains great teachers in coaching positions. By paying for coaches sustainably within recurring resources, systems make the role part of a real career progression toward which teachers can confidently aspire.

Coaching: Great Potential



he nation is looking to today's teachers to close student achievement gaps within the United States and with other nations. In most schools, each teacher bears the burden of raising student achievement for the students in his or her own classroom. Yet teachers need support to continue evolving professionally, honing their practice and using new tools—support best offered in the form of coaching. Defined broadly, coaching is a form of professional learning within the classroom or school that helps teachers develop and apply new knowledge, make strong plans for instruction and assessment, obtain feedback, refine their practices, and examine results. Excellent coaching that gives teachers this support is more important than ever in an era of rising standards and heightened expectations for students. Yet most teachers do not experience coaching at all with a principal or designated coach, and many coaches do not have the role clarity, time, or cultural support they need for optimal success.

There are many different types of coaching in education, including:

- **peer coaching**, in which colleagues work together to achieve improvements in their practice;
- **schoolwide coaching**, in which designated coaches visit, advise, plan with, and demonstrate effective practices for teachers across a school, often specializing in literacy or math; and
- **accountable team leadership**, in which a teacher selected for prior teaching excellence leads and coaches a team of teachers and takes joint responsibility for the students served by the team.

Taken together, **investments in these types of coaching represent the largest, highest-funded initiative in professional development** over the past 30 years. Coaching programs are now commonly found in U.S. schools.³ Yet coaching could often be executed or implemented much more effectively than it is, and could be more accessible for each teacher.

We must *give every teacher access to effective coaching*. Whether teachers need help developing content and pedagogical knowledge in their subject, planning lessons and assessments, analyzing student progress and changing their instruction, applying new instructional strategies, personalizing learning for diverse students, or developing leadership skills, every teacher can benefit from effective coaching. Coaching has great potential to positively impact student learning, and education leaders need to ensure that coaching is designed and implemented to achieve that potential.

States and districts have created various types of positions to support teachers that sometimes, but not always, include coaching. Too often, specialists are spread too thin to truly coach all of a school's teachers regularly and deeply.⁴ Nor can principals, typically stretched to lead 20 to 50 teachers, provide the routine coaching that teachers need. In a national survey of U.S. teachers, only 49 percent reported that they had received coaching.⁵ Principals report that the majority of in-school coaching is focused on new and struggling teachers.⁶ Yet coaching also helps seasoned and solidly performing teachers develop the sophisticated skills required to move from good to great.

State and local leaders can do more to ensure that every teacher has access to effective coaching, and now is a particularly urgent time to do so. Schools across the nation are working hard to align their systems and instruction with the goal of college- and career-readiness for every student. Faced with this relatively new goal for K–12 education, many teachers have found the required shifts in instructional practice and content knowledge to be daunting. New evaluation systems and student information systems also give teachers more information about their performance. But this information is only helpful when translated into ongoing feedback and analysis on which a teacher can act. Too often, teacher evaluators lack the time, depth of engagement, or skill to deliver such feedback on the daily or weekly basis teachers need.⁷

When education and policy leaders commit to making coaching the professional learning experience it is meant to be, they invest in a strategy that drives continuous teacher improvement and increases student achievement. Coaching has the potential to propel changes in two areas:

■ **Improved instruction and learning.** Research has shown that instruction can change and students can benefit from effective coaching of their teachers. Several comparison-group studies have found that teachers who experience high-quality coaching are more likely to enact new teaching practices and apply them more appropriately than teachers who engage in more traditional professional learning, such as workshops and conferences.⁸ Although not all studies show correlations between coaching and student learning gains, it is important to note that not all coaching is equal, and many models, styles, and structures exist. Some studies of coaching fail to specify the model used, whether coaches were trained, or the number of hours teachers were coached. Recent studies of literacy coaching efforts have found significant student learning gains when teachers received one-on-one support from well-trained coaches.⁹

■ **Better career pathways and teacher leadership opportunities.** Coaching programs can create classroom-based career pathways and teacher leadership roles. Schools can formalize such roles with time during the school day for coaches to work with other teachers, in some cases even sharing responsibility for the same students. Teachers can earn more for taking on these responsibilities, helping to attract and retain great teachers in schools.¹⁰ Growing

interest in teacher career pathways and teacher leadership make this an important time to outline elements of effective coaching and to create those roles within schools.

Learning Forward, the University of Florida Lastinger Center, and Public Impact have long advocated for high-quality coaching for teachers, with years of lessons learned about how to make coaching a force for instructional improvement. Learning Forward brings to this effort deep knowledge and experience as the nation's only professional association devoted exclusively to those who work in educator professional learning.¹¹ The Lastinger Center, based at the University of Florida College of Education, field-tests and shares information about models that transform teaching.¹² Public Impact, a research and consulting organization, is working with districts and schools to implement school models that extend the reach of excellent teachers and create coaching roles that help all teachers strive toward excellence.¹³ Together, these partners understand the promise of coaching and the challenges that must be overcome to realize its potential.

Based on our experience, the research base on coaching, and a forward-looking analysis of the changing context of coaching in this era, we call on the nation's education leaders to make a renewed commitment to coaching teachers that meets a set of high expectations for quality outlined in this report.

We envision a future in which all teachers benefit from high-quality, effective coaching that makes professional learning a part of what teachers do each day in their schools. To establish a system that prioritizes ongoing, job-embedded professional learning that we know teachers want and need, we must direct energy and resources to ensure that coaching is designed to provide just that. This brief discusses the state of coaching today and six pillars that must be built or strengthened to realize the promise of coaching for all teachers and ultimately, their students: system vision and commitment; recruitment and selectivity; shared responsibility; development and support; role clarity, time and culture; and compensation and sustainability.

Six Pillars to Create Coaching for Impact



Pillar 1: System Vision and Commitment

Providing great coaching to all teachers needs to begin with a commitment from the top. The leaders of the “system”—whether that is a school district, a state, a charter management organization, or some other collection of schools—must commit to giving all teachers the support they need via coaching. This commitment will be strongest if:

- Top leaders, including board members and senior staff across departments, share the focus on coaching teachers to success.
- The system’s overall strategy for instructional excellence includes coaching as a central “big bet,” not an add-on or afterthought. The strategy articulates a compelling theory of action for how strong coaching roles will lead to continuous instructional improvement for all teachers.

- Leaders make clear what roles each actor in the system has to play in making coaching successful, from central office departments, to principals, coaches, and teachers themselves.
- The system dedicates the resources—human and financial—needed to make coaching successful, including investment in Pillars 2 through 6 below.
- Leaders align policies at all levels in support of the approach to coaching to which they have committed.

System leaders must address each of the remaining five pillars in their commitment to coaching. If they don't, they risk maintaining a system in which the availability and quality of coaching varies. The potential for coaching to yield big gains for teachers and students will be realized only when leaders take this comprehensive approach.

“The most significant movement is that as a district, we are now approaching a critical mass of educators who have meaningful discussions around classroom practice based on data. Those important conversations are creating more reflective teachers and impacting student learning.”

—Val Brown, Leadership Pathways Coordinator, Seminole County, Florida, Public Schools

Pillar 2: Recruitment and Selectivity

To establish a system of coaching that positively affects teaching and learning, school and district leaders need to recruit and select the right individuals for the role. It is easy to recognize individuals who have the potential to make a good coach someday. These individuals exhibit excellent teaching practice, garner their colleagues' respect, engage in continuous improvement, and demonstrate leadership skills.¹⁴ However, these promising signs alone are too general and insufficient to signal whether a person will make an effective coach for fellow teachers. Efforts to recruit, screen, select, prepare, and deploy coaches must consider the full array of behaviors and dispositions, as well as the knowledge and skills, that coaches need to be equipped for success.

Coaching roles are not for everyone. Selectivity is essential when screening and choosing coaches. Districts and schools should aim to recruit coaching candidates who demonstrate the needed combination of expertise and skill.



Guideline for districts and schools: Develop reliable and valid measures of coaching potential and effectiveness

Districts and schools need reliable, valid measures to assess the potential of prospective coaches and the effectiveness of practicing coaches.¹⁵ Coaching roles have varying purposes and goals, making it impossible to have universal measures of expertise. This is an area for further research and development, but the lack of measures can be overcome in the meantime. Districts and schools can:

- **Require evidence of teaching effectiveness, including student growth.**

Coaches should be drawn from the top educators in the profession, with proven success addressing student learning needs in the setting where they will coach. However, being an effective teacher does not necessarily mean a person should become a coach.

- **Assess attributes and behavioral competencies.** This area needs more research, but Public Impact has developed a set of competencies for “multi-classroom leaders” that are based on available research and can be assessed in an interview format. These competencies for coaches of teaching teams have been honed by the hiring experiences of several districts.¹⁶

- **Include a performance assessment or demonstration.** Organizations that have screened potential coaches have been surprised to find that when asked to demonstrate key coaching competencies, many individuals failed who on paper had experience that suggested they would be equipped to coach.¹⁷ New coaches will need to hone their skills in these and other areas, but before assuming the role of coach should be able to demonstrate an acceptable level of skill in observation and feedback. When effectively designed, training programs such as Lastinger Center’s Certified Instructional Coaching program can also provide evidence that prospective coaches have developed key coaching competencies.¹⁸

When districts and schools focus on evidence when choosing coaches, teachers are more likely to benefit from coaching experiences that meet their professional learning needs. And students are more likely to benefit when skilled coaches are on tap to help their teachers.



Pillar 3: Shared Responsibility

When multiple individuals contribute to a teacher’s professional learning, they must share a set of goals. An analysis of professional learning in districts revealed that teachers typically experience bits and pieces of support from personnel spanning central office departments or school roles such as teacher-leaders, professional learning community leads, and instructional specialists.¹⁹ For teachers to receive clear messages and advice about the ways they can improve professionally, support staff should make

distinct contributions toward agreed-upon goals for each individual teacher. However, in a survey of instructional coaches, one-third did not feel responsible for the performance and growth of the teachers they work with, and nearly two-thirds did not feel accountable for their outcomes.²⁰ Instructional coaches also do not typically coordinate or share development goals for a teacher. As a result, teachers receive fragmented or even conflicting advice and feedback. If support staff were focused on a set of articulated learning goals for each teacher, teachers would experience a more coordinated system of help and reinforcement as they strive for improvement.

“My job is to ensure growth in all my teachers, because I am accountable for all of our students. My job is to ensure that every single one of my students, in all eight classes, has the most effective teacher standing up front each day, because our students deserve that kind of dedication to their lives.” — Kristin Cubbage, Multi-Classroom Leader at Ashley Park PreK–8 in Charlotte, N.C.²¹

Teachers and principals are more accountable for student learning than ever before. When coaches share that accountability, their coaching becomes more clearly connected to teachers’ professional learning and the student learning that results. There are various ways to construct the role of a school-based coach. Some function as an accountable team leader, working closely with a group of teachers in a grade level or subject area. Some coaching roles are designed to provide assistance as needed across a broader span of teachers. In either case, the role must include time for coaches to work with teachers within and outside of the classroom, and responsibility must be clearly defined according to the coach’s role.

Guideline for districts and schools: Give coaches responsibility to improve teaching and learning

Coaches need to be recognized members of the school team, sharing responsibility alongside principals and teachers. Districts and schools can take three key actions to create shared responsibility:

- **Require that the primary responsibility of coaches is to enhance teachers’ instruction.** Objectives for coached teachers will vary by school, district, and individual need. Examples include needing to reduce teacher attrition,²² to improve teacher responses on surveys of working conditions, to create a

culture of “collective ownership” for student learning across a team of teachers, or to move ratings of teacher practice in evaluation systems.²³ Regardless of specific program objectives, all coaches should be responsible for teachers showing progress on evaluation measures and for teacher satisfaction with their coaching.

■ **Require that coaches share in the responsibility for student outcomes.**

Though many factors influence student learning, successful coaching should have a positive effect that is measurable. Despite the oft-cited argument that it is too challenging to attribute outcomes to a coach, recent studies of literacy coaching have found significant student learning gains when teachers received one-on-one support from well-trained coaches.²⁴ Defining a coach’s responsibility for student learning creates an environment in which the coach and the teacher being coached share a common goal for which they are jointly responsible, fostering teamwork and collaboration. To fulfill this responsibility, coaches will likely want to continue teaching students in some way, to remain connected to the work of the teachers they support.

■ **Demonstrate that the district is committed to helping coaches succeed.**

The system’s commitment to coaching must be firmly in place before coaches are required to share responsibility for student and teacher outcomes. Coaches should be expected to carry this responsibility only when undergirded by the time and support needed to work intensively with teachers. When a district demonstrates this commitment to coaching, coaches are more likely to view shared responsibility as a reasonable requirement.

When coaches have clear responsibility for teacher and student outcomes, the guidance they provide to teachers carries greater significance, because they are seen as collaborators pursuing a shared result. This dynamic differs greatly from coaching roles that lack responsibility for outcomes. Coaches and teachers who share responsibility for teaching and learning become instructional partners who are equally invested in making the coaching relationship work for teachers and students.



Pillar 4: Development and Support

Coaching is complex—a highly demanding professional role that may take years to master.²⁵ Coaches need regular professional learning opportunities to help them understand and become skilled leaders of adult learning and the change process. Coaches also need to hone their own knowledge of research-based instructional practices and evolving expectations for student learning. The *Untapped* report from New Leaders notes that many instructional coaches never received high-quality training. For example, 86 percent of schools have teacher-leader roles, but only 32 percent offer specialized teacher leadership training.²⁶

Districts and schools should design professional learning opportunities and expectations when designing the coaching role. This emphasis should be established in schedules and role expectations, ensuring that coaches understand the support available to them and how the learning will help them become more effective.

“Successful coaches develop precise skills, including the ability to lead adults to learn, use targeted questioning to help coachees overcome learning barriers, and employ effective strategies that get them to commit to new skills and behaviors.”—from *Becoming a Learning System*²⁷

Guideline for districts and schools: Give coaches regular feedback to help them improve

It usually takes considerable time to develop coaching expertise. Districts and schools cannot afford to leave the coach’s development to chance, and should take three steps to ensure that coaching improves and that effective coaching continues and grows within the district.

- **Design opportunities for coaches to improve their practice.** Joellen Killion and other experts who have studied coaches have identified several strategies for districts and schools to offer coaches effective, ongoing professional learning, including the following:²⁸

Establish regular meetings with peers and the school principal or other instructional leader. Whether weekly, biweekly, or monthly, coaches need a regular format to discuss successes and challenges and learn from one another.

Observe and debrief examples of coaching. Just as teachers benefit from observation and debrief in their classrooms, coaches benefit from observation and debrief. Peers can observe while the coach works with a teacher, then learn from the experience in a facilitated conversation that helps each coach identify ways to strengthen their own skills and repertoire of strategies.

Engage coaches and principals in co-learning and co-planning. Coaches benefit when their principal understands their work and is invested in removing day-to-day challenges. Principals can meet with their team of coaches to review data, set priorities, and troubleshoot challenges together, or develop plans for implementing new initiatives and instructional approaches.

■ **Evaluate coaches using multiple measures, just as in valid teacher evaluation.**

Training is only part of the equation: Teachers in coaching roles also benefit from evaluative feedback from supervisors, peers, and teachers they are coaching. Evaluation should be constructed in a manner that identifies areas for growth in coaching effectiveness. Schools and districts can choose from a variety of methods for measuring coaching success, such as: classroom walk-throughs, observation forms, data from satisfaction surveys administered to teachers and principals, disaggregated student data, observations of coaches in action, and anecdotal and qualitative data collected from teams a coach works with, such as ongoing and exit interviews.

■ **Establish mechanisms to analyze and share data on coaching.** To seed an improvement cycle in coaching, systems must gather and analyze outcomes data that help individual coaches understand where they are strong and where they need to improve. Systems also need to capture the results of coaching to help school board members and key stakeholders understand when effective coaching is in place and what it will take to extend that coaching to all teachers in the system.

With guidance on how to build and use their expertise, teachers are more likely to strengthen their instructional impact over time. Principals and districts also benefit from having a clear understanding of the effectiveness of their coaches, which helps them set priorities and make changes as needed to improve school culture and student learning.



Pillar 5: Role Clarity, Time, and Culture

Teachers need frequent, intensive interactions with their coach. If coaches are to help teachers understand, apply, and refine new practices, they need to be in close contact. This is an area for improvement: A survey by the Bill & Melinda Gates Foundation found that only 24 percent of teachers report engaging in coaching or mentoring activities at least weekly.²⁹ A survey by TNTP found that teachers report receiving roughly six hours of coaching *per year*.³⁰ That's an average of 10 minutes a week. Teachers have also reported that their coaching lacks follow-up and is often curtailed before they have sufficient opportunities to practice new skills.³¹

In addition, coaches need distinct roles that allow them to remain focused on their purpose. Coaching roles can be full-time or part-time. They can be established within district or school administration, and can be paired with classroom teaching duties in different forms. Whatever the arrangement, coaching duties must be protected from other personnel demands. The book *Coaching Matters* notes that it is common for coaches to be pulled in many directions without parameters that ensure coaching is their primary function. Coaches also tend to lack the mandate and authority to do more than offer advice. Schools and districts will be better able to determine whether coaches are effective when they have been given clear roles and responsibilities.

To establish a strong coaching culture that encourages teachers to continuously improve their craft, schools must be structured to make coaching effective. Recent research by Bain & Company found that many districts are investing in programs to develop transformational leaders, but there is rarely a plan in place to deploy those leaders effectively within a school setting.³³ School and district leaders need to address barriers to coaches' work, such as the lack of a schoolwide understanding of the coach role; a lack of time for coaches and teachers to work together; coaches' assignment to non-coaching duties; and teachers' reluctance to be coached.³⁴ Once these barriers are overcome, schools become environments that not only welcome coaching but are primed to capitalize on its potential to drive improvement.

“Coaches, regardless of their expertise, are not able to transform a school single-handedly. Conditions must be favorable to coaching, and coaches must have the support, skills, and resources to make a difference.”

—from *Coaching Matters*³²

Guideline for districts and schools: Create a professional learning environment that helps coaches and teachers work together effectively

■ **Define the coaching role clearly.** Whatever a coach's mix of teaching and coaching responsibilities, for the coaching portion, they must be deployed to focus on instructional work rather than administrative tasks such as substitute teaching and test monitoring. This expectation and commitment from the district or school leader should be captured in a formal job description that outlines clear responsibilities without distractions.

System and school leaders also need to ensure that teachers understand the role that coaches are meant to play. Coaches exist in a middle ground between teachers and administrators, and their role needs definition to help them build relationships and trust with teachers. District and school leaders must make clear whether coaches will participate in the evaluation of teachers, whether they have the authority to direct teacher activities, and how they will communicate and work with principals.

■ **Make deliberate coaching assignments.** Coaching assignments should aim to create longevity in coaching relationships and the feasibility to work intensively with each teacher. Districts and schools should avoid using coaching solely as an intervention for underperforming teachers, which can hamper the benefit of coaching with a compliance focus and inability to establish

rapport with teachers over a short-term assignment. Rather, coaching assignments should be made to support and foster excellence for every teacher in a school. This signals a schoolwide culture focused on growth and improvement. System and school leaders must also ensure that each coach's load, including any schoolwide responsibilities and the coach-to-teacher ratio, makes it possible for coaches to give each teacher sufficiently intensive support to change or strengthen their practice.³⁵

- **Create time for coaches and teachers to work together.** District and school leaders should address three key needs to promote and protect the time needed for coaching to succeed:

Coaches need significant time to work with teachers. As described by coaching experts at Learning Forward, the ideal structure for ongoing professional learning is to provide teachers with time embedded in the school day, preferably setting aside at least three to four hours per week for collaboration among teachers, between teachers and their principals, and among principals.³⁶ Coaches also seem to function best when their coaching load is concentrated within a single school³⁷ and with a small enough group of teachers to allow depth.³⁸ Districts and schools need to keep these parameters in mind when determining the coach's responsibility.

Teachers need ample time to practice with a coach's support. Research shows that students make significant gains when their teacher is engaged in sustained, intensive professional learning.³⁹ Teachers typically need close to 50 hours of learning and practice in an area to improve their skills and their students' learning. Researchers have described the "implementation dip" of practice—the awkward and frustrating period that occurs when teachers integrate a new skill into existing practice. During this time, they need support to push through to mastery.⁴⁰ Coaching can be a powerful mechanism to combat this dip, but only if coaches can help teachers during the implementation stage by regularly observing, giving feedback, and encouraging teachers to continue to practice new skills.

Schools need the flexibility to rethink the use of time in the school day. Teachers in the U.S. spend 80 percent of their workday directly interacting with students, compared with 60 percent in other industrialized countries. U.S. schools can rethink the balance between teachers' time spent on instruction and time spent planning, receiving coaching, and analyzing data to improve their practice. Districts should offer schools the flexibility to use schedules and staff in new ways.

- **Protect coaches from non-coaching tasks.** Schools must identify the core areas of work for coaches, maximize their time on those, and minimize or eliminate their time on other areas. Schools can rethink the way administrative tasks are handled to free up time for coaches and teachers. For example, traditional grade-level chairs are typically relied upon for administrative

functions, with no release time or expectation that they engage in instructional coaching. While a teacher-leader responsible for a team will always have some administrative responsibilities, schools should maximize the time coaches can devote to helping other teachers improve and to teaching students directly. For coaches who will continue to teach students, schools should determine the desired ratio of time spent coaching and teaching, and should protect coaches from being pulled into extra instructional responsibilities to the detriment of their coaching role.

When districts and schools begin to consider the cost of wasted coaching time, they can begin to think more creatively about how to recapture that time for professional learning. Up to 30 percent of a teacher's time is expended in bureaucratic duties such as taking attendance, compiling report cards, and patrolling hallways and cafeterias. Reports on this topic have documented the large opportunity costs associated with such inefficient use of teachers' time and expertise.⁴¹ These opportunity costs also apply to coaches, whose value is greatly diminished when they are not focused on their core work. A 2015 survey of 65 districts in Florida revealed that many coaches actually spend only about one-third of their time working with teachers.⁴²

- **Overcome teachers' reluctance to be coached.** School culture and climate contribute to the success of coaching—particularly the communication and relationships between principals, coaches, and teachers. A coach and a principal should collaborate about the school's improvement goals. The principal sets a vision for instructional improvement and communicates the coach's role in supporting that vision.⁴³ The principal must *set an expectation that all teachers engage with coaches* and openly address any resistance that arises. Having all teachers experience coaching, regardless of performance, creates an expectation of continuous improvement, rather than a culture of remediation focused on low performers. The principal should also demonstrate this culture of continuous improvement by monitoring and supporting the coaches' development as members of an instructional leadership team.

*Teachers demonstrate greater willingness to work with a coach when the coach's role is clear.*⁴⁴ Whether the coach's role is leading a team or working as needed with teachers in a school, the principal will need to make the purpose of that role clear. For example, if the principal's objective is to ensure that teachers receive deeper feedback than he or she can provide after observing all teachers multiple times, that purpose and role should be clearly communicated.⁴⁵

When districts and schools provide coaching for all, the support can be highly rewarding for teachers who might otherwise have remained satisfactory or average for their careers. It is even more rewarding for their students, who will benefit from slight and dramatic changes in instructional practice.



Pillar 6: Compensation and Sustainability

Teachers are regularly asked to take on additional roles, such as a sports coach or drama director, for which they receive additional pay. Teachers are comfortable with this type of differential. Surveys of teachers reveal that they prefer role-based pay over performance-based pay. One national survey showed that 46 percent of teachers favored financial incentives based on test score results, while 65 percent of teachers preferred giving financial incentives to teachers who “consistently work harder, putting in more time and effort than other teachers.”⁴⁶ Teachers are rarely compensated sufficiently for taking on non-administrative teacher leadership roles requiring additional time and responsibility.

A coaching role becomes a true career-building opportunity for teachers when it offers a route to lead their peers in instructional excellence while continuing to teach. Such roles keep excellent teachers in the classroom, where their expertise has the greatest effect on student learning. For teachers who seek to become principals, coaching offers the chance to cultivate the combination of expertise and skill an instructional leader needs.

“A lot of great teachers are leaving the classroom to seek leadership roles that come with more sustainable compensation. But I get that without leaving the classroom. With this role, yes, it comes with more responsibilities, and yes, it means I’m held responsible for all 421 scholars.”

—Bobby Miles, Multi-Classroom Leader at Ranson IB Middle School in Charlotte, N. C.⁴⁷

When designed in this way, coaching becomes an integral, long-term function in schools. The ongoing costs of coaching programs should be embedded in the overall school system and school budget. This ensures that coaching roles are funded from recurring sources, not special grants or programs. But districts and schools can take heart—it is possible to make these roles financially sustainable.

Guideline for districts and schools: Take a fresh look at the time and resources available for coaching

- **Establish role pay that increases as coaches progress in responsibility and effectiveness.** Pay for roles has become common, accepted, and even desired. For example, 87 percent of districts that received grants through the Teacher Incentive Fund reported offering teachers additional pay for taking

on additional roles and responsibilities. Among the most common roles reported were mentor teacher (66 percent) and master or lead teacher (55 percent).⁴⁸

Role pay is essential to attract new talent. The new crop of teachers coming from Generation Y overwhelmingly support giving such financial incentives to teachers who put in more time and effort than other teachers.⁴⁹ In fact, to attract this new generation to teaching, districts need to offer career trajectories within the classroom. Young would-be teachers must be able to see themselves evolving within the profession. This means districts will need to offer teacher leadership roles that are sustainably designed and funded.

Role pay is also essential to retain top performers in the classroom. Cross-sector research shows that high performers are more likely to stay in a profession when they experience: high, purposeful salary growth; promotions and opportunities for advancement; flexible and challenging work roles; and membership on lasting teams of their peers.⁵⁰ To have top-performing teachers in the pool of potential coaches, districts need to first retain those individuals by offering this combination of meaningful career growth for teachers.

■ **Analyze current professional learning expenditures.** Research estimates that pre-recession spending on professional learning occupied 2 to 5 percent of a typical district's budget. However, many districts do not track their professional learning spending at all, leaving them in the dark about their costs.⁵¹ When they do, they see they have significant funds available. Education spending on professional development actually far exceeds what other industries spend on support and development for their practitioners.⁵² Most of this spending remains within districts. In a study of district professional development expenditures, the Gates Foundation found that just \$3 billion of the \$18 billion spent annually is for services delivered by external providers. These are dollars that districts could be using to support high-quality, school-based coaching.

■ **Rethink current use of dollars in all areas.** In addition to rethinking the allocation of professional learning dollars, districts can also analyze their current use of dollars in other areas. This requires a willingness to challenge assumptions about roles and spending, looking for opportunities to create high-impact coaching roles for teachers. For example, districts and schools can reorganize current staffing structures to embed coaching into the daily practice of teaching. When this approach is taken, role changes and new staffing structures at the district and school levels can free up dollars to reallocate. Changes in *school-level budgets* to pay for supplements for team leaders are particularly sustainable because they are not district-level line items subject to budget cuts or changing priorities in the central office. For this to work well, schools must be funded equitably, with high-need schools

granted sufficient resources to meet their students' needs and to compete for great teachers.

- **Value professional learning time without relying on a punch card.** In the old way of thinking about professional learning, the most significant cost item for districts was purchasing time for teachers to spend in professional learning communities and with coaches.⁵³ It was assumed that professional learning would happen apart from the day-to-day instructional planning and delivery. With a coaching orientation instead, districts and schools can use scheduling, team structures, differentiated staffing, and paraprofessional support staff to build time for coaching into the school day.
- **Use one-time funds strategically, with the long game in mind.** Many teacher leadership programs have been funded by the federal Teacher Incentive Fund, a grant program designed to help districts establish performance-based pay programs. It is not unusual for districts to spend grant dollars on pay supplements for teachers, rather than using those funds to help them dig into current budgets to rethink and reallocate. This creates a cycle of short-run programs that fail to result in sustainable career paths for teacher coaches. Districts can use one-time grant opportunities to create high-impact, sustainably funded coaching roles that offer a true career path for top performers and a lasting source of support for all.

When designed to be high-impact, coaching can make substantial contributions to the instructional mission of schools. To capitalize on the under-tapped potential of coaching, districts and schools will first need to make it a paid, sustainable role that teachers can aspire to and top performers can grow into. Making pay for coaches sustainable within recurring resources is essential to making the role a real career progression toward which teachers can confidently aspire.

Sustainable funding for coaching roles will not be attainable if districts seek to add those roles on to current structures. Once districts and schools commit to making high-impact coaching a core professional learning function within their schools, the idea of sustainable funding becomes less daunting. By envisioning the future they desire, educators and leaders become empowered to evaluate current expenditures and engage in the work it takes to redesign roles and staffing.

Conclusion:

The Future of High-Impact Coaching



Plenty of current investments in coaching-type positions are not living up to their potential. But research has shown that instruction can change and students can benefit from effective coaching. We need to focus attention and effort on creating and growing high-impact coaching roles that accrue the benefits we seek for teachers and students.

We need more research to strengthen evidence and guidance about the best forms of coaching. The research base has many gaps, and there is little evidence to tout any particular model of coaching as most effective.⁵⁴ We need studies to identify variables in coaching arrangements and school contexts that improve and impede outcomes for students and teachers. Districts and schools will benefit from improved understanding about variables such as targets in frequency and time allotments for coaching activities. Such guidance will help systems and schools hone coaching arrangements to achieve even greater success.

But systems and schools need not wait for the research to catch up. Experience and emergent studies have illustrated that coaching roles can be a powerful mechanism to achieve an array of goals: meaningful career paths to retain top performers, job-embedded professional learning that creates a cycle of continuous improvement in schools, and instructional practice that raises outcomes for students. When educators and leaders take care to build coaching roles upon the six pillars outlined here, they will be building the schools of the future that they have imagined for so long.

Learning Forward, the University of Florida Lastinger Center, and Public Impact are members of the Redesign PD Partnership. The Partnership includes more than 25 leaders from top education advocacy, membership, and philanthropic organizations, as well as state and local education agencies. These stakeholders convene to address the critical need to redesign professional learning systems and have committed to collective and individual actions that disrupt the status quo in professional development.

Notes

1. Darling-Hammond, L., et al. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. Dallas, TX: National Staff Development Council. Retrieved from <http://learningforward.org/docs/pdf/nsdcstudy2009.pdf>
2. Medrich, E., Fitzgerald, R., & Skomsvold, P. (2013). *Instructional coaching and student outcomes: Findings from a three year pilot study* [Abstract]. MPR Associates. Retrieved from http://piic.pacoaching.org/images/PIICdocuments/Research_and_Eval/piic_report_abstract.pdf; Biancarosa, G., Byrk, A. S., & Dexter, E. R. (2010). Assessing the value-added effects of literacy collaborative professional development on student learning. *The Elementary School Journal*. Chicago, IL: The University of Chicago. Retrieved from <http://www.literacycollaborative.org/docs/research/ESJ-value-added.pdf>
3. Bierly, C., Doyle, B., & Smith, A. (2016, January 14). *Transforming schools: How distributed leadership can create more high-performing schools*. Bain & Company. Retrieved from <http://www.bain.com/publications/articles/transforming-schools.aspx>
4. For example, see TNTP. (2015). *The mirage: Confronting the hard truth about our quest for teacher development*. Brooklyn, NY: Author. Retrieved from http://tntp.org/assets/documents/TNTP-Mirage_2015.pdf. This review of three large school districts and one midsize charter network found that in addition to principals and assistant principals, schools employ staff members to directly support teachers, such as literacy and math specialists, instructional or curriculum specialists, professional learning community leaders, and teacher evaluation staff. But the review found that these personnel must spread their time across 14 to 37 teachers each.
5. Darling-Hammond, et al. (2009). *Professional learning in the learning profession*.
6. Bill & Melinda Gates Foundation. (2014). *Teachers know best: Teachers' views on professional development*. Seattle, WA: Author. Retrieved from http://k12education.gatesfoundation.org/learning/teacher_views_on_professional_development
7. Gandha, T. & Baxter, A. (2016). *State Actions to Advance Teacher Evaluation*. Atlanta, GA: Southern Regional Education Board. Retrieved from http://publications.sreb.org/2016/160210_stateactionstoadvanceteachereval.pdf
8. Three such comparison group studies emerged in the 1990s and early 2000s. Showers, B. & Joyce, B. (1996). *The evolution of peer coaching*. Alexandria, VA: The Association for Supervision and Curriculum Development. Retrieved from <http://www.ascd.org/publications/educational-leadership/marg6/vol53/num06/The-Evolution-of-Peer-Coaching.aspx>; Knight, J. (2004). Instructional coaches make progress through partnership: Intensive support can improve teaching. *Journal of Staff Development*; Kohler, F., Crillery, K., Shearer, D., & Good, G. (1997). Effects of peer coaching on teacher and student outcomes. *Journal of Educational Research*. 90, 240–250.
9. Medrich, Fitzgerald, & Skomsvold. (2013). *Instructional coaching and student outcomes*; Biancarosa, Byrk, & Dexter. (2010). Assessing the value-added effects of literacy collaborative professional development.
10. See Public Impact's Opportunity Culture initiative website, www.OpportunityCulture.org.
11. Learning Forward offers Coaching Academies and practitioner-oriented research-based resources to help school systems establish effective coaching programs for continuous improvement. See www.learningforward.org.
12. Lastinger has developed instructional coaching programs for early childhood coaches, elementary and secondary coaches in varied subject areas, coaches of preservice teachers, and leadership coaching for principals, assistant principals, and district staff. Studies indicated that the Lastinger model of coaching leads to improvement in the instructional practices of early childhood practitioners who demonstrate lower levels of competence prior to coaching and that teachers perceive coaching as beneficial in their learning and changes in practices, and suggested that coaching may lead to instructional improvements for math and science teach-

ers. Burns, J. B. (2015). *Coaches' impact on early learning teachers' CLASS scores* [Unpublished doctoral dissertation]. University of Florida, Gainesville, Florida; Rodgers, M. K. (2015). *Reflective coaching: tensions and transformations from teachers' experience* [Unpublished doctoral dissertation]. University of Florida, Gainesville, Florida; Williams, R. L. (2016). *The impact of instructional coaching on secondary teachers* [Unpublished doctoral dissertation]. University of Florida Gainesville, Florida.

13. Learn more at <http://opportunityculture.org>. Public Impact has outlined **five Opportunity Culture principles** to guide the design work undertaken by districts and schools. Public Impact has compiled additional resources related to teacher-led professional learning at <http://teacherledprofessionallearning.org/>. Also see Public Impact. (2015). *The whole package: 12 factors of high-impact teacher-leader roles*. Chapel Hill, NC: Author. Retrieved from http://publicimpact.com/web/wp-content/uploads/2015/11/The_Whole_Package_12_Factors_of_High-Impact_Teacher-Leader_Roles-Public_Impact.pdf; Hassel, E. A. (1999). *Professional development: Learning from the best*. North Central Regional Educational Laboratory. Retrieved from http://publicimpact.com/web/wp-content/uploads/2015/11/Professional_Development_Learning_from_the_Best-Public_Impact.pdf.

14. Killion, J., & Harrison, C. (2006). *Taking the lead: New roles for teachers and school-based coaches*. Oxford, OH: National Staff Development Council.

15. Biancarosa, Byrk, & Dexter. (2010). Assessing the value-added effects of literacy collaborative professional development.

16. See explanations of competencies <http://opportunityculture.org/selection-toolkit/step-1/>. These competencies have not yet been validated with research. Public Impact has also created screening tools for human resource teams. Public Impact. (2015). *Teacher and staff selection toolkit: A guide for districts and schools*. Chapel Hill, NC: Author. Retrieved from <http://opportunityculture.org/selection-toolkit/step-3/>

17. Startup EdConnective reported on its efforts to recruit teacher coaches, finding just 16 offers from a pool of 420 applicants, 92 of whom on paper possessed experiences believed to be indicative of highly effective coaching. Morris, W. (2015, September 17). Great feedback for teachers is hard to find. *Education Week*. Retrieved from http://blogs.edweek.org/edweek/the_startup_blog/2015/09/educators_struggle_to_give_good_feedback.html

18. For more information, see the Lastinger Institute website at <http://lastingercenter.com/wp-content/uploads/2015/09/CoachingAcademy2015Ver41.pdf>

19. TNTP. (2015). *The mirage*.

20. Bierly, Doyle, & Smith. (2016). *Transforming schools*.

21. Cubbage, K. (2016, May 16), "What is my job, anyway?" Teacher hindsight from a multi-classroom leader. *RealClear Education*. Retrieved from http://www.realcleareducation.com/articles/2016/05/16/what_is_my_job_anyway_teacher_hindsight_from_a_multi-classroom_leader__1290.html

22. Ingersoll, R., & Kralik, J. M. (2004). *The impact of mentoring on teacher retention: What the research says*. Denver, CO: Education Commission of the States. Retrieved from <http://www.gse.upenn.edu/pdf/rmi/ECS-RMI-2004.pdf>

23. For example, see Hirsch, E. et al. (2012). *Improving teacher working conditions: Lessons from North Carolina schools*. The New Teacher Center.

24. Medrich, Fitzgerald, & Skomsvold. (2013). *Instructional coaching and student outcomes*; Biancarosa, Byrk, & Dexter. (2010). Assessing the value-added effects of literacy collaborative professional development.

25. Gibson, S. (2005). Developing knowledge of coaching. *Issues in Teacher Education*. 14, 63–74; Gibson, S. (2006). Lesson observation and feedback: The practice of an expert reading coach. *Reading Research and Instruction*, 45(4), 295–318.

26. Valdez, M., Broin, A. (2015). *Untapped: Transforming teacher leadership to help students succeed*. New Leaders. Retrieved from http://www.newleaders.org/wp-content/uploads/NewLeaders_Untapped.pdf

27. Hirsh, S., Psencik, K., & Brown, F. (2014). *Becoming a learning system*. Oxford, OH: Learning Forward, p. 207.
28. These strategies are described in Killion, J., Harrison, C., Bryan, C., & Clifton, H. (2012). *Coaching Matters*. Oxford, OH: Learning Forward.
29. Bill & Melinda Gates Foundation. (2015). *Teachers know best*.
30. Note that data is reported for a two-year period. TNTP. (2015). *The mirage* (p. 50).
31. TNTP. (2015). *The mirage* (p. 26).
32. Killion, Harrison, Bryan, & Clifton. (2012). *Coaching matters*.
33. Bierly, Doyle, & Smith. (2016). *Transforming schools*.
34. See page 57 of *Coaching Matters*, which references Marsh, J. et al. (2008). *Supporting literacy across the Sunshine State: A study of Florida middle school reading coaches*. Santa Monica, CA: The RAND Corporation. Retrieved from http://www.rand.org/content/dam/rand/pubs/monographs/2008/RAND_MG762.pdf
35. A study estimating the cost effectiveness of various professional learning activities recommends that schools employ one instructional coach for every 200 students. Odden, A., Goetz, M., & Picus, L. O. (2008). Using available evidence to estimate the cost of educational adequacy. *Education Finance and Policy*. 3(3), 374–397.
36. Killion, J., & Hirsh, S. (2013, August). *Investments in professional learning must change: The goals are ambitious, the stakes are high—and resources are the key*. Oxford, OH: Learning Forward. Retrieved from <http://learningforward.org/docs/default-source/jsd-august-2013/killion344.pdf?sfvrsn=2>
37. Neufeld, B., & Roper, D. (2003). *Coaching: A strategy for developing instructional capacity*. Washington, DC: The Aspen Institute; and Providence, RI: Annenberg Institute for School Reform. Retrieved from <http://annenberginstitute.org/sites/default/files/product/268/files/Coaching.pdf>
38. Bierly, Doyle, & Smith. (2016). *Transforming schools*.
39. Per Darling-Hammond, L. et al. (2009). *Professional learning in the learning profession*.
40. Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass. Retrieved from <http://www.csus.edu/indiv/j/jelinekd/edte%20227/fullanleadinginacultureof-change.pdf>; Joyce, B. & Showers, B. (1982). The coaching of teaching. *Educational Leadership*. The Association for Supervision and Curriculum Development. Retrieved from http://www.ascd.org/ASCD/pdf/journals/ed_lead/el_198210_joyce.pdf
41. Hess, F. M. (2009). Rewriting the job description: The teaching profession in the twenty-first century. *Education Outlook*. American Enterprise Institute for Public Policy Research. Retrieved from <https://www.aei.org/wp-content/uploads/2011/10/11-Edu-Hess-Nov09-g.pdf>; Natale, C., Gaddis, L., Bassett, K., & McKnight, K. (2013). *Creating sustainable teacher career pathways: A 21st century imperative* (p. 30). Pearson Education, Inc. and the National Network of State Teachers of the Year. Retrieved from http://www.nnstoy.org/download/Various/CSTCP_21CI_pk_final_web.pdf
42. The Florida Legislature's Office of Program Policy Analysis & Government Accountability. (2015). OPPAGA presentation on instructional coaches. Retrieved from <http://myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=2848&Session=2016&DocumentType=Meeting%20Packets&FileName=edc%2011-5-15.pdf>
43. Wren, S., & Vallejo, D. (2009). *Effective collaboration between instructional coaches and principals*. Retrieved from http://www.balancedreading.com/Wren_&_Vallejo_Coach_Principal_Relationships.pdf
44. Matsumura, L., Sartoris, M., Bickel, D., & Garnier, H. (2009). Leadership for literacy coaching: The principal's role in launching a new coaching program. *Educational Administration Quarterly*. 45, 655–693.
45. For more on principals not having sufficient time to give deep feedback, see Kraft, M.A. & Gilmour, A. (n.d.) *Can principals promote teacher development as evaluators? A case study of principals' views and experiences* [Working paper]. Retrieved from <http://scholar.harvard.edu/mkraft/publications/can-evaluation-promote-teacher-development>

46. Coggshall, J., Ott, A., Behrstock, E., & Lasagna, M. (2010). *Retaining Teacher Talent: The View From Generation Y*. Naperville, IL and New York: Learning Point Associates and Public Agenda. Retrieved from <http://www.publicagenda.org/media/retaining-teacher-talent>
47. Miles, B. (2015, July 15). 1 Teacher, 400 Scholars—and Loving It. *RealClear Education*. Retrieved from http://www.realcleareducation.com/articles/2015/07/15/1_teacher_400_scholars_-_and_loving_it_1209.html
48. Max, J. et al. (2014). *Evaluation of the Teacher Incentive Fund: Implementation and early impacts of pay-for-performance after one year*. Institute of Education Sciences, US Department of Education.
49. Coggshall, J., Ott, A., Behrstock, E., & Lasagna, M. (2010). *Retaining teacher talent: The view from Generation Y*. Naperville, IL and New York: Learning Point Associates and Public Agenda. Retrieved from <http://files.eric.ed.gov/fulltext/ED508142.pdf>. Similar results were also found in Duffett, A., Farkas, S., Rotherham, A. J., & Silva, E. (2008). *Waiting to be won over: Teachers speak on the profession, unions, and reform*. Washington, DC: Education Sector. Retrieved from http://educationpolicy.air.org/sites/default/files/publications/WaitingToBeWonOver_o.pdf
50. Public Impact: Ableidinger, J., & Kowal, J. (2010). *Shooting for stars: Cross-sector lessons for retaining high-performing educators*. Chapel Hill, NC: Public Impact. Retrieved from http://opportunityculture.org/images/stories/shooting_for_stars_2010.pdf
51. For example, see Miles, K. H., Odden, A., Fermanich, M., Archibald, S., & Gallagher, A. (2004, Summer). Inside the black box of school district spending on professional development: Lessons comparing five urban districts. *Journal of Education Finance*. 30(1), 1–26. Retrieved from <https://www.erstrategies.org/cms/files/1166-blackbox-fulltext.pdf>. This study examined five districts and found an average of 3.6 percent of their total operating budgets were spent on professional development.
52. TNTP. (2015). *The mirage*. This report also refers to the following: Association for Talent Development. (2014). *2014 state of the industry*; and Training Magazine. (2013). *2013 training industry report*.
53. For example, this is cited in: Gulamhussein, A. (2013, September). *Teaching the teachers: Effective professional development in an era of high-stakes accountability*. Alexandria, VA: The Center for Public Education. Retrieved from <http://www.centerforpubliceducation.org/teachingtheteachers>. Also consider an example this report cites from the 1990s: New York's District 2 committed to spend 3 percent of its budget on a coaching and professional development lab effort where expert teachers hosted other teachers. The largest costs for the district were 1) the cost of teachers' time and 2) the staffing costs for coaching and developing model lesson plans in the professional development lab.
54. Joyce, B., & Showers, B. (2002). *Student achievement through staff development*. Alexandria, VA: Association for Supervision and Curriculum Development.

